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Application No.: 09/689,222

Remark

The Applicant respectfully requests reconsideration of this application as amended. Claims 4-5, 10, 18, 24 and 38 have been amended without prejudice to increase the clarity of the claims. Claims 1-3, 6-9, 12-17, 19-23, 26-37 and 39-40 have been canceled without prejudice. Thirty-one new claims, claims 41-71, have been added. Therefore, claims 4-5, 10-11, 18, 24-25, 38 and 41-71 are present for examination.

The Applicant respectfully submits that no new matter has been included by this amendment and that new claims and the claims as amended are fully supported by the disclosure as originally filed.

Claim Rejections - 35 U.S.C. § 103

In the Office action, the Examiner rejected claims 1-40 under 35 U.S.C. §103(a) for allegedly being unpatentable over published European patent application, EP 1017200 of Himbeault et al. (hereafter "Himbeault") in view of a published US patent application, US 2002/0015387 of Houh (hereafter "Houh"). The undersigned respectfully disagrees with the Examiner's characterization of Himbeault and Houh and points out below several distinctions between the claimed subject matter and the teachings of Himbeault and Houh.

As presently understood by the undersigned, Himbeault generally relates to managing voice and data traffic over a data network and rendering a "virtual VoIP network model" that is representative of VoIP utilization of the network (see [0031]). Himbeault also discusses real-time monitoring of network performance by logging information as Voice over Internet Protocol (VoIP) packets traverse the network (see Abstract). While the virtual network map view

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provided by Himbeault purports to allow a voice engineer to make decisions about optimizing quality and reliability "by viewing and managing the VoIP application," Himbeault does not appear to teach or suggest, among other limitations expressly recited by various claims as amended, (1) providing mechanisms for the voice engineer to interactively explore how changes in path selection might affect link utilization; (2) substantially simultaneously provisioning a plurality of routers that are part of a selected path; (3) establishing a single reservation protocol session over which multiple application sessions will be multiplexed; (4) prioritizing the display of potential paths; and (5) path analysis taking into consideration a predicted increase in bandwidth allocation for routers on a selected path and a previously allocated bandwidth for those routers. Nor does Himbeault contemplate the notion of a media aggregation manager. The Examiner is respectfully directed to the "Terminology" section of the present application starting at page 12 for definitions of certain terms and phrases, such as "media aggregation manager," "reservation protocol session," "community," "application session" and "terminal," that are used in the claims.

As presently understood by the undersigned, Houh generally relates to a voice traffic packet capture and analysis tool for use in the context of a test system that provides simulation of various network conditions (see Abstract). As such, the system and methods described by Houh are not intended to be part of a VoIP network, but rather facilitate testing of such networks.

One further point regarding Houh is that it may not represent an effective prior art reference against the present application under 35 U.S.C. §102(e) as the present application was filed on October 11, 2000, which is prior to the August 1, 2001 filing date of Houh. Meanwhile, Houh claims the benefit of priority to a previously filed provisional application no. 60/222,384, filed on August 2, 2000. Consequently, only to the extent the material in Houh relied upon by the Examiner was present in the previously filed provisional application could Houh represent effective prior art against the present application; and in such case only to the extent the Applicant's date of invention is after August 2, 2000. While making this statement, and

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reserving the right to (1) establish the August 1, 2001 filing date of Houh as the effective date of the reference with respect to the present application; and/or (2) swear behind Houh, the undersigned chooses at this time to present arguments pointing out significant differences between the invention as claimed and the disclosure of Houh. Consequently, the undersigned makes no admission that Houh represents effective prior art against the present application and the Applicant hereby reserves its rights in this regard.

Assuming Houh is effective prior art against the present application and with this brief overview of Himbeault and Houh, the undersigned now submits the following arguments pointing out significant differences between the invention as claimed by the Applicant and the combination of Himbeault and Houh.

Regarding claim 4, as amended, the combination of Himbeault and Houh does not teach or reasonably suggest the method of allowing a user to interactively explore how changes in path selection between media aggregation managers affects projected link utilization. As an initial matter, neither Himbeault nor Houh even contemplate the idea of a "media aggregation manager." In the present application, a "media aggregation manager" is explicitly defined at page 12, line 5 of the specification as "a network device, such as an edge device at the ingress/egress of a user community, or a group of one or more software processes running on a network device that provides application/protocol specific multiplexing/de-multiplexing of media traffic onto a pre-allocated reservation protocol session." In the Office action, the Examiner indicates, without further explanation, that the recited media aggregation managers correspond "to the network management service, paragraph [0009]" of Himbeault. The undersigned can find no teaching or suggestion in Himbeault that the Network Management System (NMS 170) "provides application/protocol specific multiplexing/de-multiplexing of media traffic onto a pre-allocated reservation protocol session" as required by the definition of a media aggregation manager. Meanwhile, it is unclear to the undersigned what the Examiner purports to equate the recited media aggregation managers with in Houh.

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Another deficiency of the combination of Himbeault and Houh with respect to claim 4 is in connection with the expressly recited limitation of “displaying a first *projected link utilization* schedule ... illustrating *predicted bandwidth usage* for routers associated with the first path” (emphasis added). While Himbeault purports to monitor VoIP implementations for quality and reliability and discusses the ability of a voice engineer to look at real-time network performance and utilization trends, the undersigned finds no teaching or suggestion concerning displaying a “projected link utilization schedule” that illustrates “predicted bandwidth usage” for routers associated with a particular path. For at least these reasons claim 4 and is thought to be clearly distinguishable over the combination of Himbeault and Houh.

With regard to claim 10, as amended, the combination of Himbeault and Houh do not teach or reasonably suggest the explicitly recited first and second user interface screens. The first user interface screen requires graphical depictions of at least a pair of media aggregation managers. It has already been shown (above) that the NMS 170 of Himbeault is not a media aggregation manager. According to claim 10, the second user interface screen allows an end-user to initiate “configuration of a set of routers ... that are part of a selected path ... and ... establishment of the preallocated reservation protocol session.” As in the case of “media aggregation manager,” the Applicant has explicitly defined what a “reservation protocol session” is in the specification. Specifically, at page 12, line 17 of the specification a “reservation protocol session” is defined as “a set of reserved network resources, including the routers utilized for the session, established and maintained between two or more network devices that serve as proxies or gate-keepers for application endpoints residing behind the proxies.” In the Office action, the Examiner pointed to no element in Himbeault or Houh as corresponding to the recited reservation protocol session; and the undersigned after a detailed review of the references cannot identify any relevant teaching or suggestion. Meanwhile, the undersigned has found no teaching or suggestion in the combination of references relating to the limitations of a user interface screen through which “an end-user is capable of initiating ... configuration of a set of routers ... that are part of a selected path .. and ... establishment of [a] reservation protocol session.” As

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currently understood by the undersigned, Himbeault's interface facilitates management of a VoIP network by performing monitoring, analysis and reporting on a VoIP network and assisting in connection with the diagnosis of specific network problems; however, the network engineer must still use conventional node-by-node provisioning and configuration methodologies. For at least these reasons, claim 10 is thought to be distinguishable over the combination of Himbeault and Houh.

With regard to claim 18, as amended, it includes limitations similar to those discussed above with reference to claim 1 (e.g., media aggregation manager) and claim 10 (e.g., provisioning a plurality of routers that are part of a selected path). Consequently, the arguments presented above with respect to claims 1 and 10 are thought to be applicable here as well.

With regard to claim 24, as amended, it includes limitations similar to those discussed above with reference to claim 4 (e.g., media aggregation manager, and "display a first projected link utilization schedule ... illustrating predicted bandwidth usage for routers associated with the first path"). Consequently, the arguments presented above with respect to claim 4 are thought to be applicable here as well.

With regard to claim 38, as amended, it includes limitations similar to those discussed above with reference to claim 1 (e.g., media aggregation manager) and claim 10 (e.g., provision a plurality of routers that are part of a selected path). Consequently, the arguments presented above with respect to claims 1 and 10 are thought to be applicable here as well.

New Claims

By this amendment, thirty-one new claims, claims 41-71, have been added to provide depth and round out the coverage of the claims.

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New independent claim 41 includes limitations similar to those discussed above with reference to claim 10 (e.g., "configuring a set of routers ... that are part of a selected path" and "establishing a single reservation protocol session ... onto which a plurality of application sessions ... will be multiplexed"). Consequently, the arguments presented above with respect to claim 10 are thought to be applicable here as well.

New claim 45, which depends from claim 41, includes a further limitation relating to displaying the plurality of graphically depicted paths in a prioritized fashion based upon one or more predetermined factors. Contrary to the Examiner's characterization of Houh in the Office action, paragraph [0002] of Houh is not understood by the undersigned to relate to display of paths in a prioritized fashion.

New claim 47, which depends from claim 41, includes a further limitation relating to determining a total combined schedule of bandwidth allocation by combining a predicted increase in bandwidth allocation for each router and a previously allocated bandwidth allocation for each router. This further limitation is similar to the "projected link utilization" limitation discussed above with reference to claim 4. Consequently, certain arguments presented above with respect to claim 4 are thought to be applicable here as well.

New claim 54 includes limitations similar to those discussed above with reference to new claim 41 (e.g., "a set of routers ... that are part of the selected path are configured" and "a single reservation protocol session is established ... onto which a plurality of application sessions ... will be multiplexed"). Consequently, the arguments presented above with respect to claim 41 are thought to be applicable here as well.

New claim 57, which depends from claim 54, includes limitations similar to those discussed above with reference to new claim 47. Consequently, the arguments presented above with respect to claim 47 are thought to be applicable here as well.

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New independent claim 60 includes step-plus function limitations similar to those discussed above with reference to claim 18 (e.g., media aggregation manager and provisioning a plurality of routers that are part of a selected path). Consequently, the arguments presented above with respect to claim 18 are thought to be applicable here as well.

New independent claim 61 includes limitations similar to those discussed above with reference to new claim 41 (e.g., "configuring a set of routers ... that are part of a selected path" and "establishing a single reservation protocol session ... onto which a plurality of application sessions ... will be multiplexed"). Consequently, the arguments presented above with respect to claim 41 are thought to be applicable here as well.

New independent claim 71 includes step-plus function limitations similar to those discussed above with reference to claim 61. Consequently, the arguments presented above with respect to claim 61 are thought to be applicable here as well.

Conclusion

Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the pending claims are in condition for allowance. Accordingly, Applicant respectfully requests that the rejections be withdrawn and that a Notice of Allowance be issued for claims 4-5, 10-11, 18, 24-25, 38 and 41-71.

Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (303) 607-3633 if there remains any issue with allowance of the case.

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Request for an Extension of Time

The Applicant respectfully petitions for a two-month extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. 1.136(a). Enclosed is a PTO Credit Card Payment Form 2038 in the amount of \$682.00 to cover the necessary fee under 37 C.F.R. 1.17(a) and for adding additional claims. Please charge our Deposit Account No. 06-0029 for any additional charge associated with such an extension.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 06-0029.

Respectfully submitted,

FAEGRE & BENSON LLP

Date: July 9, 2004

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